

REMARKS

The application has been amended and is believed to be in condition for allowance.

Claim 10 has been amended to delete the recitation "free of any wet oxidation". As previously noted, independent claim 10 recites that the method includes performing crystallization of the strontium titanate film by dry heat treating the film at a particular temperature range between 500-650 degrees C.

Claims 10-18 were rejected under section 112, first paragraph. However, the amendment to claim 10 remedies the stated basis for this rejection. Withdrawal of the rejection is therefore solicited.

Claims 1-3, 5-8, 10-12, and 14-17 stand rejected as anticipated by WEIMER et al. (US 2002/0151107).

Claims 4, 9, 13, and 18 stand rejected as obvious over WEIMER et al.

Reconsideration and allowance of the pending claims are respectfully requested.

The recitations of "heat treating" and "dry heat treating" do not read on wet oxidation. The recitations of "... at a temperature between 500 degrees C and 650 degrees C in an inert gas ambient" are not disclosed by WEIMER et al. in that the specific temperature range is not disclosed.

WEIMER et al., in claim 1, disclose subjecting the dielectric film to a wet oxidation in a rapid thermal process chamber at a temperature of at least about 450 degrees C. Wet oxidation is not a heat treatment, and is not a dry heat treatment. See WEIMER et al. claim 33 disclosing the use of steam during the wet oxidation. Also see paragraph [0031] disclosing in situ steam generation in which hydrogen and oxygen gases are mixed within the chamber. As taught by paragraph [0032], this would not be an inert gas ambient.

See that claims 1, 5, and 10 all include recitations concerning heat treating at a temperature between 500 degrees C and 650 degrees C in an inert gas ambient, claim 10 reciting dry heat treating.

WEIMER et al. do not disclose heat treating at a temperature between 500 degrees C and 650 degrees C in an inert gas ambient. Thus, there is no anticipation of any independent claim.

WEIMER et al. disclose wet oxidation within the temperature range but does not disclose heat treatment. As to the recited temperature range, see that WEIMER et al. only teaches wet oxidation at 450-750 degrees C (claim 2). There is no disclosure of heat treatment in an inert gas ambient at the recited temperature between 500 degrees C and 650 degrees C.

The heat treatment of WEIMER et al. paragraph [0041] is not part of the wet oxidation step and there is no temperature

disclosed for this heat treatment that is within the recited range. See paragraph [0034] teaching that the heat treatment is before or after the wet oxidation.

See also WEIMER et al. claim 10, that defines the stabilization (crystallization) process using N<sub>2</sub> being performed before and after the wet oxidation. In claim 11, the teaching is using N<sub>2</sub> at a higher temperature than the wet oxidation.

The claims and specification not only do not anticipate the present invention, but teach away from the invention in that the teaching is for a temperature in excess of that recited by the claims.

See WEIMER et al. claim 14 and paragraph [0042], teaching a nitrogen temperature higher than about 750 degrees C. This temperature is well above that taught by the present invention and recited in the claims.

Thus, to the extent that there is disclosure of heat treating in an inert gas ambient, WEIMER et al. teach the temperature that is outside the recited range.

According to the pending claims, crystallization is performed in an inert gas ambient including argon, helium and nitrogen (N<sub>2</sub>) as a main component at a *temperature range between 500 - 650 degrees C.* WEIMER et al. do not make this teaching.

In summary, WEIMER et al. do not teach or suggest that heat treatment is performed in the inert gas ambient within the recited range. Rather, WEIMER et al. teach to perform the wet

oxidation as a necessary step between the two steps of stabilization at a temperature greater than that recited.

In view of the above, applicant believes that it is clear that the pending claims are neither anticipated nor rendered obvious by WEIMER et al. Accordingly, reconsideration and allowance of all the pending claims are respectfully requested.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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